To: Muenks, Shawn[shawn.muenks@dnr.mo.gov]
From: Gravatt, Dan
Sent: Tue 9/17/2013 11:48:15 AM
Subject: RE: Ferdman email response

Shawn, Aaron Schmidt forwarded a virtually identical question from Wendy through Harvey to us and asked us to respond. You might want to coordinate with him to decide if MDNR wants to respond independently as you propose below.

Daniel R. Gravatt, PG

US EPA Region 7 SUPR/MOKS

11201 Renner Boulevard, Lenexa, KS 66219

Phone (913)-551-7324

Principles and integrity are expensive, but they are among the very few things worth having.

From: Muenks, Shawn [mailto:shawn.muenks@dnr.mo.gov]

Sent: Monday, September 16, 2013 4:05 PM

To: Gravatt, Dan

Subject: Ferdman email response

Dan.

I have received some technical questions from Harvey Ferdman (Representative Bill Otto's office) regarding the ROD Selected Remedy and have drafted a response to his email below. His email was prompted by another email I received from a Wendy Lumetta which is also in the email string below. Could you please take a look and see if my response to Mr. Ferdman is accurate as I have references to EPA? Thanks.

Draft Email Response to Mr. Ferdman:

Dear Mr. Ferdman,

I have referred your questions to EPA as they are the lead agency for the West Lake Landfill. I am also providing the following information from the 2008 Record of Decision for Operable Unit 1.

You are correct that the proposed ROD landfill cover shall consist of an earthen cap and a rock armor layer. However, the final design for the ROD proposed cover has not been established yet as this will be done by EPA during the Remedial Design (RD) phase. The Remedial Design will also identify the need for and design of a gas control system. The Remedial Design has been put on hold by EPA in order to conduct the Supplemental Feasibility Study.

Please see the OU-1 Record of Decision, Section 12.2 Description of the Selected Remedy, paragraph beginning on page 44 and continuing to page 45. This paragraph states, "To prevent pressure build up under the landfill cover and/or lateral migration, gas control systems may be required. Gas control measures may involve passive venting or active collection. The need for and nature of the gas control measures will be evaluated and defined as part of the RD."

I would also like to refer you to the ROD, Section 13.2 Compliance with ARARs, page 49 second paragraph. This paragraph begins by stating, "The MDNR regulations require cover to be applied to minimize fire hazards, infiltration of precipitation, odors and blowing litter, control gas venting and vectors, discourage scavenging, and provide a pleasing appearance [10 CSR 80-3.010(17)(A)]." This language is copied directly from the Solid Waste Management Regulations. I should have been consistent with these regulations when I responded to Ms. Lumetta previously, and instead of using the word "prevent", stated that one of the functions of the proposed landfill cover is to "minimize" the possibility of a future SSE or SSO.

I hope this provides adequate clarification to your questions.

Thanks for your interest in this site,

Shawn Muenks, P.E.

Missouri Department of Natural Resources

P.O. Box 176, Jefferson City, MO 65102

Ph: (573)751-3107

Email: shawn.muenks@dnr.mo.gov

From: Harvey Ferdman | Ex. 6 - Personal Privacy

Sent: Thursday, September 12, 2013 12:15 PM

To: Muenks, Shawn

Cc: Wendy Lumetta; Otto, Bill

Subject: FW: Shawn's reply - FYI...Fw: Technical Questions re West Lake

Shawn,

One of our constituents forwarded the following email to me. Thank you for responding to her. Please clarify the following:

It is my understanding from the ROD for West Lake Landfill that the proposed cap is an earthen cap covered with rock and no gas control system. Is this correct? If it is correct, would this type of cap alone, without a gas control system, provide absolute prevention of the occurrence of an SSE or SSO?

Thanks in Advance,

Harvey

Harvey Ferdman

Policy Advisor to

Missouri State Representative Bill Otto, District 70

St. Louis, MO 63017

314-469-0595

314-761-5100 (cell)

From: Wendy Lumetta

Ex. 6 - Personal Privacy

Sent: Tuesday, September 10, 2013 9:03 AM

To: Harvey Ferdman

Subject: Shawn's reply - FYI...Fw: Technical Questions re West Lake

Sent: Tuesday, September 10, 2013 7:09 AM Subject: RE: Technical Questions re West Lake

Ms. Lumetta,

I am leaving to visit some of my other sites over the next couple days, but I can give some quick responses to your questions.

- 1. I can not give a guarantee that a SSE will not spontaneously start in Area 1 or Area 2. This possibility is currently under investigation as part of continuing work on the Supplemental Feasibility Study requested by EPA. I can say that the nature of the waste material in Area 1 and Area 2 is much different than that of the Bridgeton Landfill. It is older (placed in the 1950s to 1960s) and there is evidence it did not receive large amounts of municipal waste (household trash) as did the Bridgeton Landfill which makes the possibility of a SSE originating in these areas less likely. But as I stated previously, this is under investigation.
- 2. Capping landfilled areas is a routine measure to prevent subsurface thermal reactions by preventing infiltration of oxygen. This feature works in conjunction with other gas control systems. So, yes, the EPA proposed cap will prevent the possibility of a future SSE or SSO.

Let me know if you have any other questions.

Shawn Muenks, P.E.

Missouri Department of Natural Resources

P.O. Box 176, Jefferson City, MO 65102

Email: shawn.muenks@dnr.mo.gov
From: \ Ex. 6 - Personal Privacy Sent: Monday, September 09, 2013 4:49 PM To: Muenks, Shawn Subject: Technical Questions re West Lake
Mr. Muenks,
As I have still not heard from Irene or DNR's HR Department, I await their previously promised reply.
I appreciate the opportunity you have extended to answer my technical questions regarding West Lake. Here are my initial questions:
1. With the known SSE in the South Quarry, and one or more SSO's in the North Quarry, what guarantees can DNR give that an SSE won't spontaneously start in Area 1 or Area 2?
2. If the EPA-proposed cap is put on, will it prevent the possibility of future SSE's or SSO's?
I have many questions and wlll need time to formulate them. Please get back to me with the answers to these initial questions.
Thank you,

Ph: (573)751-3107

Ex. 6 - Personal Privacy

9/06/13